Frisbee Dog

Kit contains:

- dog and frisbee templates
- 1 clothespin with hole
- 2 small paper clips

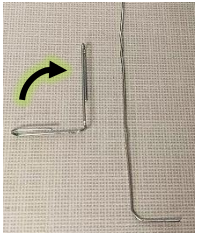
You will need: scissors and tape.

MORTON GROVE PUBLIC LIBRARY
6140 Lincoln Avenue, Morton Grove, IL 60053
Youth Info Desk: 847-929-5102 | mgpl.org

INSTRUCTIONS

Step 1. Cut out dog and frisbee.

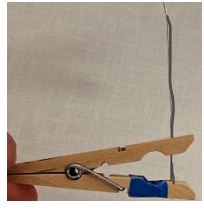
Step 2. Bend your paper clips.

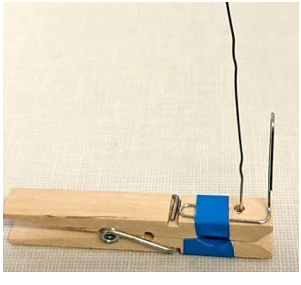


<u>First clip:</u> Make an **L** by straightening the entire wire except for one short end.

<u>Second clip:</u> Bend one U upward 90 degrees as shown.

Step 3. Thread the long **L** wire up through the hole in the clothespin. Tape the short end to the bottom of the clothespin.





Step 4. Sit the second wire on top of the clothespin with the upright piece at the front edge. Tape in place.

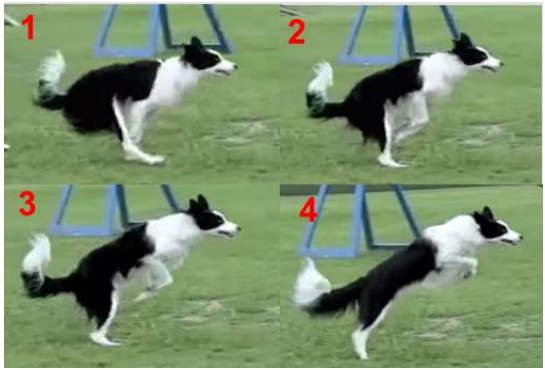
Step 5. Tape the dog to the front wire on top of the clothespin.

Step 5. Give the top wire a little lean to the left, away from the dog. This will provide some **lateral** (side-to-side motion). Fold a little bend at the top of the wire for the frisbee. Test the placement, then tape that frisbee in place!

When you squeeze open the clothespin, the dog jumps up and catches the frisbee!

DOGGY PHYSICS

Real dogs are excellent jumpers. To understand how they do it, we must remember **Newton's third law of motion**: For every action, there is an equal and opposite reaction. When dogs jump, first they push down against the ground with their front feet. This lifts their front halves up into the air (Go, opposites!). Then they apply a powerful force downward with their hind legs. The ground applies an equal and opposite force upward, launching Doggo into the air.



Source: https://tinyurl.com/5n6th2px